

Assessment Schedule – 2009**Mathematics: Use straightforward algebraic methods and solve equations (90147)****Evidence Statement**

Question	Achievement	Achievement with Merit	Achievement with Excellence	
	Use straightforward algebraic methods. Solve equations.	Use algebraic methods and solve equations in context.	Use algebraic strategies to investigate and solve problems.	
ONE (a)(i)	$w = 27$			A = 2 of 1(a)(i), (ii), or (iii)
(a)(ii)	$m = -0.25 = -\frac{1}{4}$			
(a)(iii)	$x = -3, x = 0.5$			
(b)		$3 - 2x > 7$ $x < -2$ both inequality and solution required		M = A + 1(b) E = M + 1(c)
(c)			Using the area of the large square $(a + b)^2 = c^2 + 2ab$ $a^2 + 2ab + b^2 = c^2 + 2ab$ $a^2 + b^2 = c^2$	

TWO (a)	$(x + 12)(x - 5)$			A = 2 of 2(a), (b) or (d)(i) M = A + 2(c) or A + 2(d)(ii)
(b)	$n = 6$			
(c)		$r = \sqrt{\frac{A}{4\pi}}$		
(d)(i)	$T = 2n + 1$			
(ii)		$P = n^2 + 2n$ OR equivalent		
(iii)			$n^2 + 2n = 323$ or $n(n + 2) = 323$ AND $n = 17$ rows of patchwork.	E = M + 2(d)(iii)

Note: 1A indicates only one achievement response correct in a question and is not the same as an A.

Judgement Statement

Achievement	Achievement with Merit	Achievement with Excellence
2 A or 2 from 1(a)(i), (ii), (iii) + 1 from 2(a), (b) (d)(i) or 2 from 2(a), (b) (d)(i) + 1 from 1(a)(i), (ii), (iii)	1 M + 1 A	1 E + 1 M

Lower case **a**, **m**, **e** may be used throughout the paper to indicate contributing evidence for overall grades for questions. The circled upper case **A**, **M** and **E** grades shown at the end of each full question are used to make the final judgement.

The following Mathematics-specific marking conventions may also have been used when marking this paper:

- Errors are circled.
- Omissions are indicated by a caret (^).
- **NS** may have been used when there was not sufficient evidence to award a grade.

- **CON** may have been used to indicate 'consistency' where an answer is obtained using a prior, but incorrect answer and **NC** if the answer is not consistent with wrong working.
- **CAO** is used when the 'correct answer only' is given and the assessment schedule indicates that more evidence was required.
- **#** may have been used when a correct answer is obtained but then further (unnecessary) working results in an incorrect final answer being offered.
- **RAWW** indicates right answer, wrong working.
- **R** for 'rounding error' and **PR** for 'premature rounding' resulting in a significant round-off error in the answer (if the question required evidence for rounding).
- **U** for incorrect or omitted units (if the question required evidence for units).
- **MEI** may have been used to indicate where a minor error has been made and ignored.